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100A

FIG. 1A

TITLE: METHOD AND SYSTEM FOR CLUSTERING DATA STREAMS FOR A VIRTUAL ENVIRONMENT
INVENTOR(S): W. Bruc Culb rts n, John Apostolopoulos, Nina Bhatti, Daniel G. Gelb, Michael E. Goss,
Thomas Malzbender, Kei Yuasa
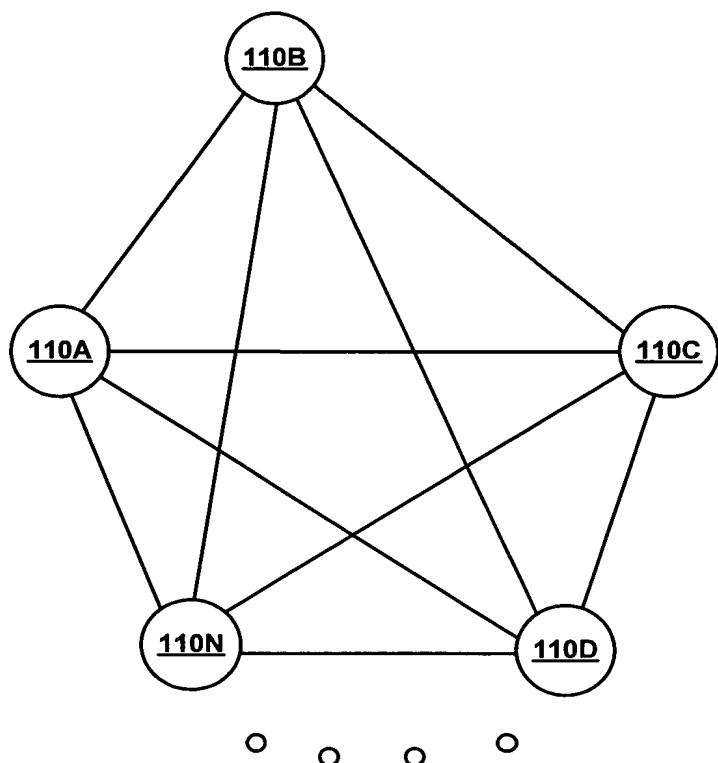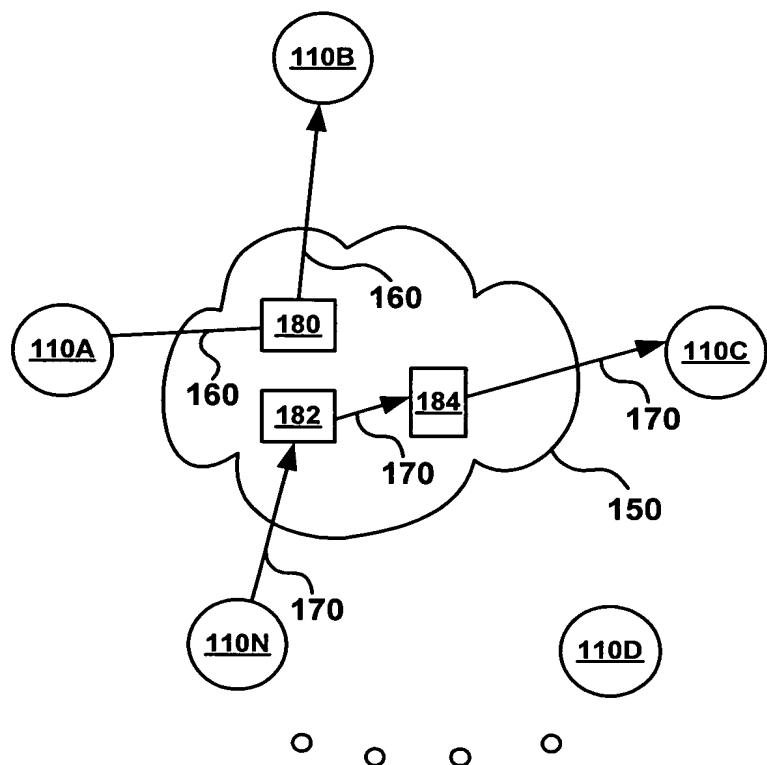Attorney Docket #: HP-200315392-1

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100B

FIG. 1B

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200

Start

Determining A Cluster Of Receiving Nodes In A Virtual
Environment, Wherein Each of the Cluster Of Receiving
Nodes Have Associated Values for at Least One Clustering
Parameter That As a Set Satisfies a Test
210

Generating A Common Data Stream Based On The
Clustering Parameter
220

Sending The Common Data Stream From A Sending
Node To The Cluster Of Receiving Nodes
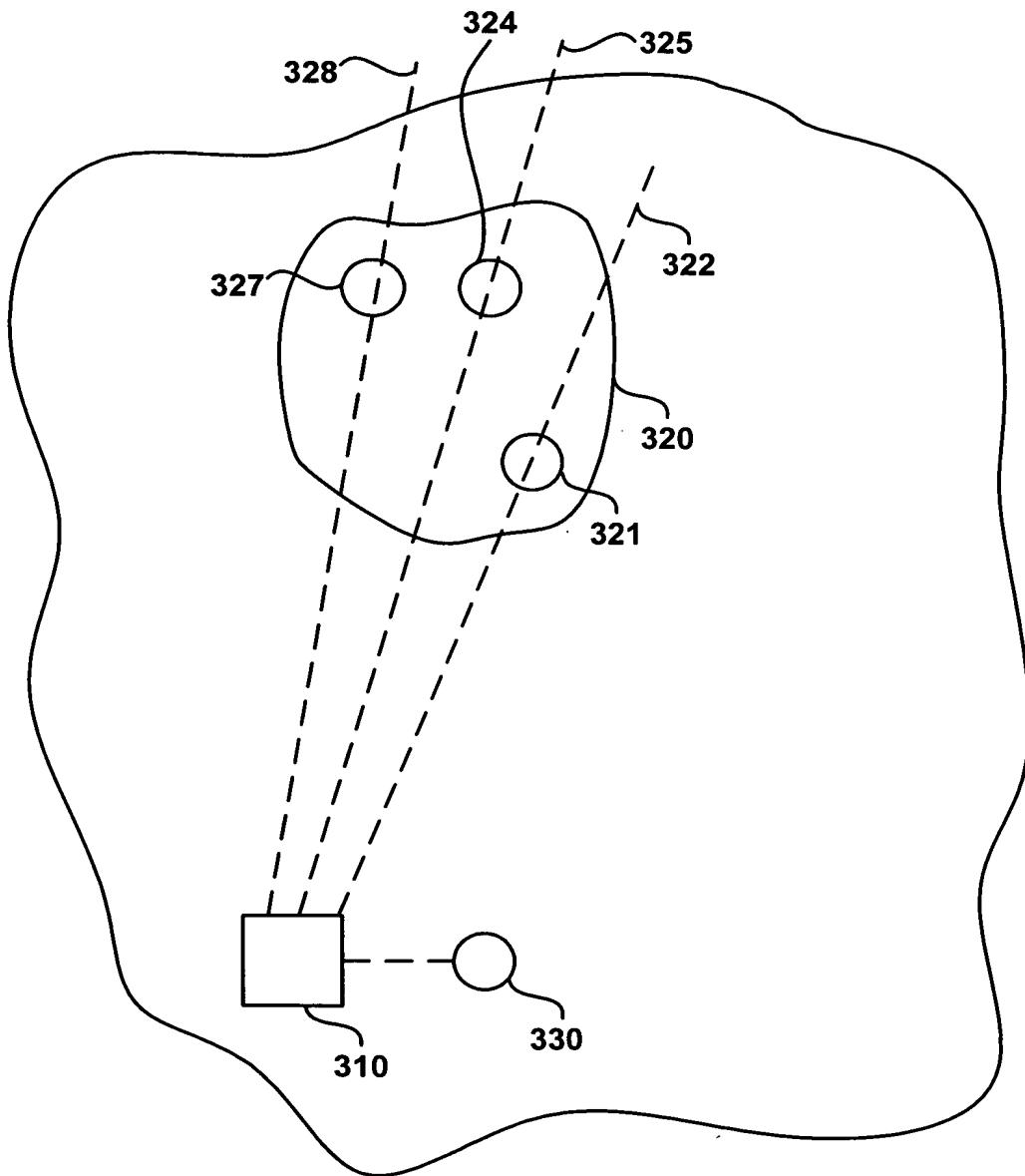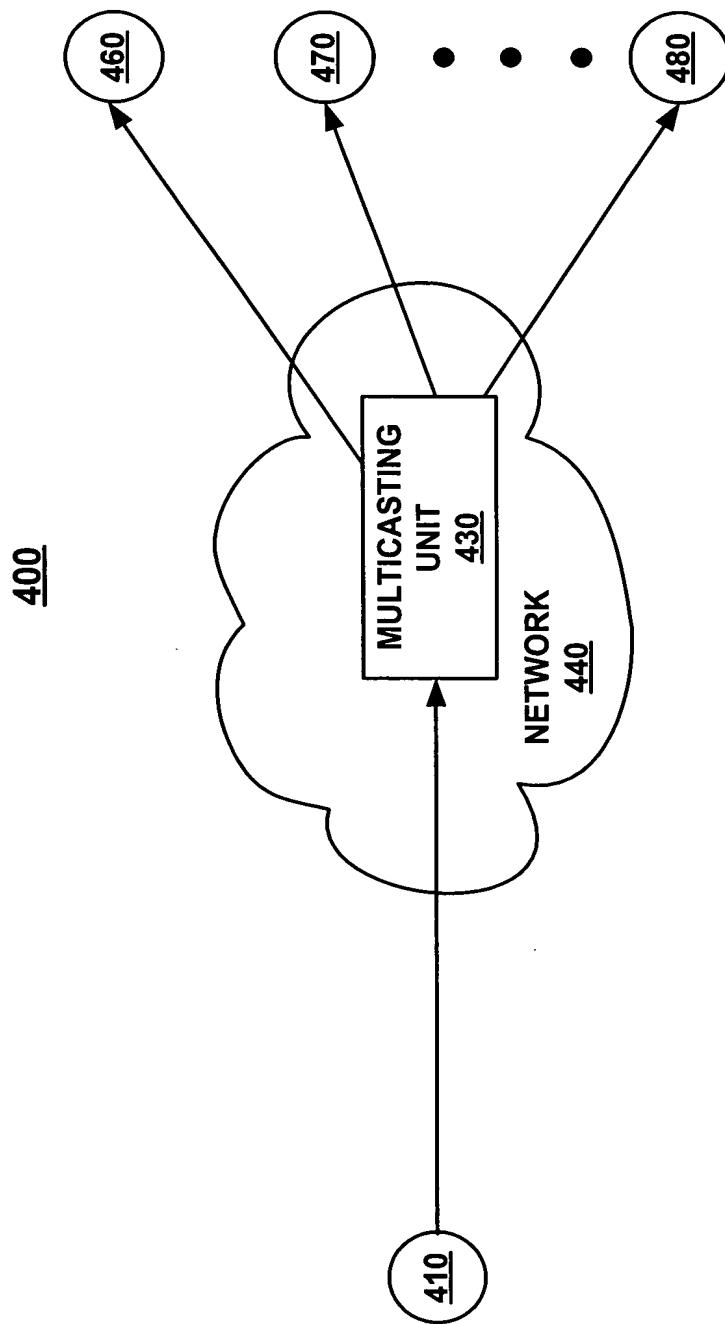230

End

FIG. 2

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300

FIG. 3

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FIG. 4

TITLE: METHOD AND SYSTEM FOR CLUSTERING DATA STREAMS FOR A VIRTUAL ENVIRONMENT
INVENTOR(S): W. Bruc Culbertson, J hn Ap stolopoulos, Nina Bhatti, Daniel G. Gelb, Michael E. Goss,
Th mas Malzbender, Kei Yuasa
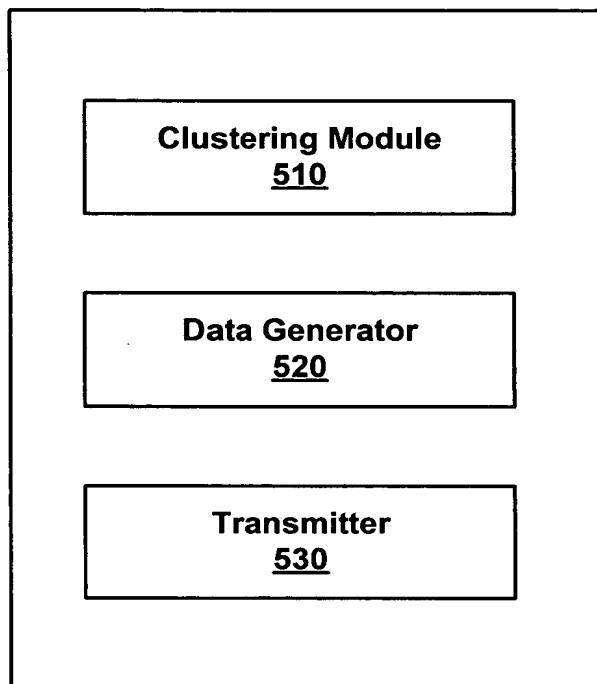Att rney D cket #: HP-200315392-1

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500

Clustering Module
510

Data Generator
520

Transmitter
530

FIG. 5

FIG. 6A

TITLE: METHOD AND SYSTEM FOR CLUSTERING DATA STREAMS FOR A VIRTUAL ENVIRONMENT
INVENTOR(S): W. Bruc Culb rtson, John Ap st l poulos, Nina Bhatti, Dani l G. Gelb, Michael E. Goss,
Thomas Malzbend r, K i Yuasa
Att rney Docket #: HP-200315392-1

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600B

encoding = mpeg1

receiver
660

receiver
682

680

sender
650

encoding = mpeg2

encoding = mpeg2

receiver
684

encoding = mpeg4

receiver
670

FIG. 6B

TITLE: METHOD AND SYSTEM FOR CLUSTERING DATA STREAMS FOR A VIRTUAL ENVIRONMENT
INVENTOR(S): W. Bruc Culb rtson, John Apostol poulos, Nina Bhatti, Dani l G. Gelb, Michael E. Goss,
Thomas Malzb nder, Kei Yuasa
Att rn y Dock t #: HP-200315392-1
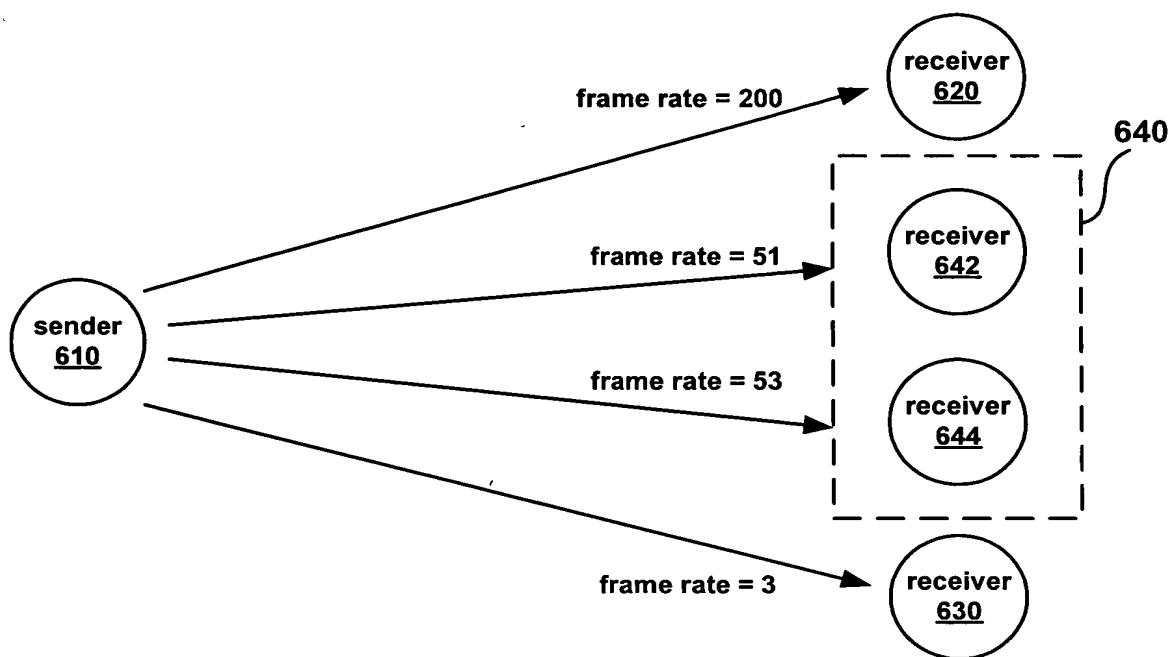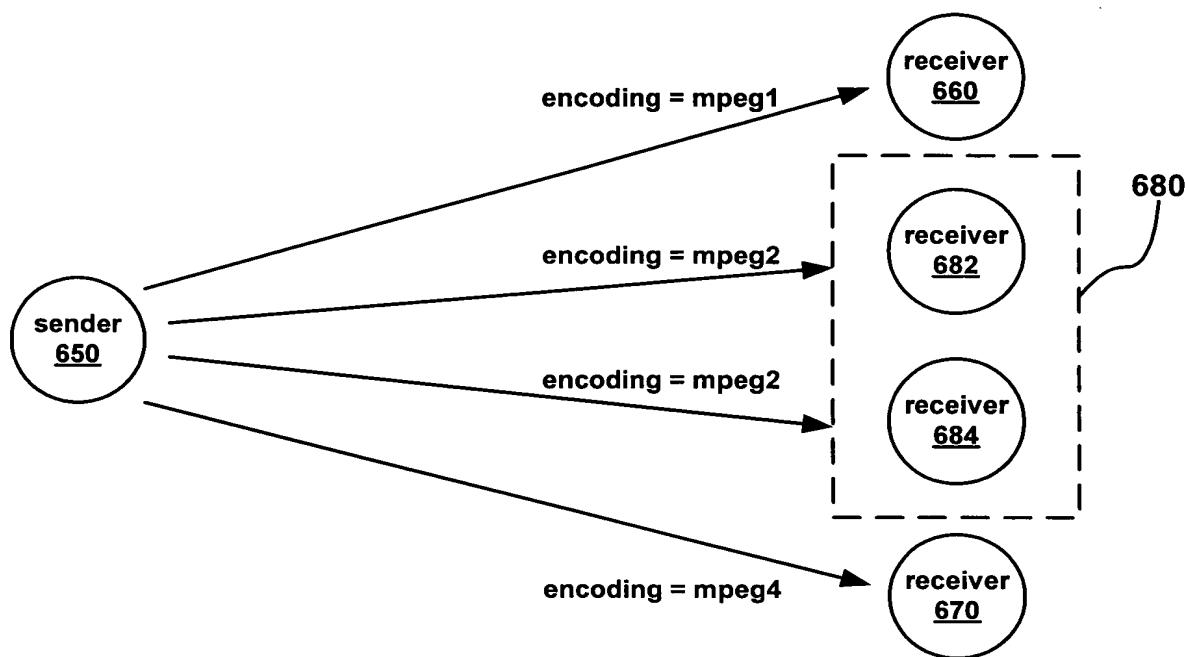
700

Start

Determining A Cluster Of Receiving Nodes Among A
Plurality Of Receiving Nodes, Wherein A Plurality Of
Varying Data Streams Are Generated By A Sending
Node For All of the Plurality of Receiving Nodes
Depending On An Associated Value Of A Parameter
For All Of The Plurality Of Receiving Nodes, And
Wherein Each Of The Cluster Of Receiving Nodes Have
Associated Values For The Parameter That As A Set
Satisfies A Test Such That Data Streams Associated With
The Cluster of Receiving Nodes Are Substantially Similar
710

Generating A Common Data Stream Of A Sending
Object Associated With The Sending Node Based On
A Representative Value Of The Parameter
720

Sending The Common Data Stream To The Cluster Of
Receiving Nodes
730

End

FIG. 7